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[54] **SERINE PROTEASE AND USES THEREOF**

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[58] **Field of Search** 435/6, 212, 320.1, 435/240.2, 252.3; 536/23.2; 935/77, 78

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[57] **ABSTRACT**

The present invention provides a purified and isolated nucleic acid molecule encoding serine protease (Met-ase) having Met-ase activity but not Asp-ase activity and a molecular weight of about 30,000 daltons on SDS PAGE under reducing and non-reducing conditions. The present invention also provides a vector comprising this nucleic acid molecule, a prokaryotic or eukaryotic host cell stably transformed or transfected with the vector, as well as a method for detecting this nucleic acid in a sample.

20 Claims, 9 Drawing Sheets